

## **LISTING OF THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Claims 1-3 (Canceled)**

4. (Original) The use of erythropoietin and/or derivatives for production of a pharmaceutical composition containing a dose of 1 to 90 IU/kg of body weight per week, preferably 1 to 45 IU/kg of body weight per week, and/or a mixture of endothelial progenitor cells with at least one cell population usable for cell therapy, wherein the erythropoietin in this dose is suitable and designed for regeneration of tissues or vessels in a human or animal body, and wherein the mixture has been brought into contact with erythropoietin in vitro prior to application.

5. (Previously Presented) The use of erythropoietin and/or derivatives for production of a pharmaceutical composition containing a dose of 1 to 90 IU/kg of body weight per week, preferably 1 to 45 IU/kg of body weight per week, and/or a mixture of endothelial progenitor cells with at least one cell population usable for cell therapy, wherein the erythropoietin in this dose is suitable and designed for regeneration of tissues or vessels in a human or animal body, and wherein the erythropoietin is administered before, after or simultaneously with application of the mixture.

6. (Original) The use of erythropoietin and/or derivatives for production of a pharmaceutical composition or of a kit containing a dose of 1 to 90 IU/kg of body weight per week, preferably 1 to 45 IU/kg of body weight per week, and/or at least one chemical, thermal, mechanical or biological agent, especially a pharmacological active ingredient, for production of a pharmaceutical composition or of a kit containing erythropoietin in this dosage and the at least one chemical, thermal, mechanical or biological agent, for prevention or treatment of diseases, wherein the erythropoietin in this dose is suitable and designed for sequential, timed successive or

simultaneous application of the erythropoietin with the at least one chemical, thermal, mechanical or biological agent.

Claims 7 - 9 (Canceled)

10. (Original) The use of erythropoietin and/or derivatives for production of a pharmaceutical composition containing a dose of 1 to 90 IU/kg of body weight per week, preferably 1 to 45 IU/kg of body weight per week, for production of a kit containing erythropoietin, endothelial progenitor cells and at least one cell population usable for cell therapy, wherein the erythropoietin is preferably present in low dosage.

Claims 11 - 14 (Canceled)

15. (Original) The use of erythropoietin in a low dosage of 1 to 90 IU/kg of body weight per week for the therapy of pathological states or diseases of the human or animal body associated with a dysfunction of endothelial progenitor cells, and wherein the pathological states or diseases associated with a dysfunction of endothelial progenitor cells are hepatic disorders such as hepatitis, cirrhosis of the liver, acute or chronic liver failure, bone and cartilage disorders or lesions, mucous membrane disorders or lesions, especially in the gastrointestinal tract, Crohn's disease, ulcerative colitis, renal function restrictions with glomerular filtration rates of 30 to 80 ml/min, microalbuminuria, proteinuria, elevated ADMA levels or wounds and sequelae thereof.

Claims 16 - 18 (Canceled)

19. (Original) The use of erythropoietin in a low dose, especially of 1 to 90 IU/kg of body weight per week, for the therapy of hepatic disorders such as hepatitis, cirrhosis of the liver, acute or chronic liver failure, bone and cartilage disorders or lesions, mucous membrane disorders or lesions, especially in the gastrointestinal tract, Crohn's disease, ulcerative colitis, renal function

restrictions with glomerular filtration rates of 30 to 80 ml/min, microalbuminuria, proteinuria, elevated ADMA levels or wounds and/or sequelae thereof.

Claims 20 - 31 (Canceled)

32. (Original) The use of erythropoietin for production of a transplantable endothelial preparation.

Claims 33 - 38 (Canceled)

39. (Original) A pharmaceutical composition for stimulation of endothelial progenitor cells, for stimulation of the formation of endothelial tissue, for stimulation of vasculogenesis and/or for treatment of diseases or pathological states associated with a dysfunction of endothelial progenitor cells, comprising erythropoietin and/or a derivative, an analog, a modification or a mutein thereof as the active ingredient as well as at least one further active ingredient selected from the group comprising VEGF, PIGF, GM-CSF, an ACE inhibitor such as enalapril, ramipril or trandolapril, an AT-1 blocker such as irbesartan, losartan or olmesartan, an HMG-CoA reductase inhibitor and an NO donor, preferably in a low dose, especially of 1 to 90 IU/kg of body weight per week.

40. (Currently Amended) A pharmaceutical composition for at least one of prevention and and/or therapy of hepatic disorders, said composition comprising at least one of erythropoietin, and/or a derivative, an analog, a modification or a mutein thereof as the active ingredient, at a dose preferably in a small dose, especially of 1 to 90 IU/kg of body weight per week.

Claims 41 - 44 (Canceled)

45. (Original) A kit containing erythropoietin, endothelial progenitor cells and at least one cell population usable for cell therapy, wherein the erythropoietin is preferably present in low dosage.

Claims 46 - 48 (Canceled)

49. (Original) A kit containing erythropoietin in a dose of 1 to 90 IU/kg of body weight per week, preferably 1 to 45 IU/kg of body weight per week, an endoprosthesis and if necessary a cell therapeutic, preferably endothelial progenitor cells or other cell populations usable for cell therapy.

Claims 50 and 51 (Canceled).

52. (Original) The use of erythropoietin in a small dose of 1 to 90 IU/kg of body weight per week for therapy of insulin resistance.

53. (Currently Amended) A pharmaceutical composition for at least one of prevention and and/or therapy of insulin resistance, said composition comprising at least one of erythropoietin and/or a derivative, an analog, a modification and [[or]] a mutein thereof as the active ingredient, in a dose preferably in a small dose, especially of 1 to 90 IU/kg of body weight per week.

Please add the following new claims:

54. (New) A method for treating a human or animal patient exhibiting a) at least one dysfunction of endothelial progenitor cells, b) at least one cardiovascular risk factor and c) at least one end-organ damage, said method comprising administering to said patient a pharmaceutical composition comprising a dosage of from 1 to 90 IU/kg of body weight per week of at least one of erythropoietin and a derivative thereof.

55. (New) The method of claim 54, wherein the at least one cardiovascular risk factor is selected from the group consisting of hypertension, hypercholesterolemia, elevated asymmetric dimethylarginine (ADMA) levels, increased insulin resistance and hyperhomocysteinemia.

56. (New) The method of claim 54, wherein the at least one end-organ damage is selected from the group consisting of left ventricular hypertrophy, microalbuminuria, cognitive dysfunction, increased thickness of the intima media in the carotid artery, proteinuria and a glomerular filtration rate of 30 to 80 ml/min.

57. (New) The method of claim 54, wherein the dosage of the at least one of erythropoietin and a derivative thereof is 1 to 45 IU/kg of body weight per week.

58. (New) A method for cosmetic treatment of a human or animal body, said method comprising administering to said human or animal body a pharmaceutical composition comprising a dosage selected from the group consisting of from 1 to 90 IU/kg of body weight per week and from 1 to 45 IU/kg of body weight per week of at least one of erythropoietin and a derivative thereof, wherein the cosmetic treatment is at least one selected from the group consisting of treatment of wrinkles, strengthening of the connective tissue, protection and tightening of the skin, protection against harmful environmental effects, treatment of age spots, acceleration of reepithelialization, acceleration of hair growth and use as a makeup foundation.

59. (New) The method of claim 58, wherein said pharmaceutical composition is adapted for topical application to said human or animal body.

60. (New) A method for the prevention or treatment, in a subject in need thereof, of a disease selected from the group consisting of hepatic disorders, bone and cartilage disorders or lesions, mucous membrane disorders or lesions, Crohn's disease, ulcerative colitis, renal function restrictions with glomerular filtration rates of 30 to 80 ml/min, wherein the hepatic disorder is selected from the group consisting of hepatitis, cirrhosis of the liver, acute liver failure and chronic liver failure and the mucous membrane disorders or lesions are situated in the gastrointestinal tract of said subject said method comprising administering to said subject a pharmaceutical composition comprising a dosage selected from the group consisting of from 1 to

90 IU/kg of body weight per week and from 1 to 45 IU/kg of body weight per week, of at least one of erythropoietin and a derivative thereof.

61. (New) A method for at least one of improving, promoting and accelerating the integration into the body of a subject of a mechanical or biological agent, which method comprises administering to a subject in need thereof a pharmaceutical composition comprising a dosage selected from the group consisting of from 1 to 90 IU/kg of body weight per week and from 1 to 45 IU/kg of body weight per week, of at least one of erythropoietin and a derivative thereof.

62. (New) The method of claim 61, wherein the agent is an endoprosthesis selected from the group consisting of a tooth implant, a tooth replacement, a bone implant, a bone replacement, a ligament/tendon replacement, and a solid organ.

63. (New) A method for preventing or treating insulin resistance in a subject in need thereof, said method comprising administering to said subject a pharmaceutical composition comprising a dosage selected from the group consisting of from 1 to 90 IU/kg of body weight per week and from 1 to 45 IU/kg of body weight per week of at least one of erythropoietin and a derivative thereof.

64. (New) The composition of claim 40, wherein the hepatic disorder is selected from the group consisting of hepatitis, cirrhosis of the liver, acute or chronic liver failure, bone and cartilage disorders or lesions, ligament and tendon disorders or lesions, mucous membrane disorders or lesions, Crohn's disease, ulcerative colitis, renal function restrictions with glomerular filtration rates of 30 to 80 ml/min, microalbuminuria, proteinuria, elevated ADMA levels or wounds and sequelae thereof.